WHAT IS CLAIMED IS

1. An address resolution method for a communication system comprising a plurality of mobile packet terminals (mobile stations: MS), a connection oriented type network which accommodates the mobile packet terminals (MS) and supplies a connection oriented type communication, a connectionless type network having a switch node (SW) and an inter-working function (IWF) for mutually connecting the respective networks, comprising the steps of:

receiving data containing a "Gratuitous-ARP" packet which is one type of "address resolution protocol" (ARP) (see IETF:Internet Engineering Task Force Document RFC826), from the mobile packet terminal (MS) on the inter-working function (IWF), in that when a mobile packet terminal (MS) is handed over;

transmitting the packet to the connectionless type network on the inter-working function (IWF);

making the switch node (SW) receive it on the inter-working function (IWF);

renews a physical address management table provided in the switch node (SW) on the basis of the content of the packet on the switch node (SW); and

determining the inter-working function (IWF) at the handover destination of the mobile packet terminal (MS) on the switch node (SW).

2. The address resolution method as claimed in claim 1,

wherein when the handover over the inter-working function (IWF) is detected, the mobile packet terminal (MS) creates and transmits the IP address of its own mobile packet terminal (MS)

to a transmission IP (Internet Protocol) address portion of the "non-group ARP" and a target IP address portion, and creates and transmits to a transmission physical address portion an ARP request message in which a mobile ID of its own mobile packet terminal (MS) is set.

3. The address resolution method as claimed in claim 1,

wherein when the handover over the inter-working function (IWF) is detected, the mobile packet terminal (MS) creates and transmits the IP address of its own mobile packet terminal (MS) to a transmission IP (Internet Protocol) address portion of the "non-group ARP" and a target IP address portion, and creates and transmits to a transmission physical address portion an ARP request message in which the telephone number of its own mobile packet terminal (MS) is set.

4. The address resolution method as claimed in claim 1,

wherein the inter-working function (IWF) uses Ethernet as the connectionless type network, and when receiving data containing the ARP request message from the mobile packet terminal, the inter-working function (IWF) converts the data to an Ethernet frame which is the optimum format to the Ethernet as a physical layer of the connectionless type network and transmitting the frame to the connectionless type network.

5. The address resolution method as claimed in claim 1,

wherein the inter-working function (IWF) uses as the connection oriented type communication system an IS-95 system which is standardized in EIA (Electronic Industries Association)/TIA (Telecommunication Industry Association), ANSI (American

National Standard Institute) and CDG (CDMA Development Group) serving as institutes of standards of U.S.A.

6. The address resolution method as claimed in claim 2,

wherein when the handover over the inter-working function (IWF) is detected, the mobile packet terminal (MS) creates and transmits the IP address of its own mobile packet terminal (MS) to a transmission IP (Internet Protocol) address portion of the "non-group ARP" and a target IP address portion, and creates and transmits to a transmission physical address portion an ARP request message in which the telephone number of its own mobile packet terminal (MS) is set.

7. The address resolution method as claimed in claim 2,

wherein the inter-working function (IWF) uses Ethernet as the connectionless type network, and when receiving data containing the ARP request message from the mobile packet terminal, the inter-working function (IWF) converts the data to an Ethernet frame which is the optimum format to the Ethernet as a physical layer of the connectionless type network and transmitting the frame to the connectionless type network.

8. The address resolution method as claimed in claim 2,

wherein the inter-working function (IWF) uses as the connection oriented type communication system an IS-95 system which is standardized in EIA (Electronic Industries Association)/TIA (Telecommunication Industry Association), ANSI (American National Standard Institute) and CDG (CDMA Development Group) serving as institutes of standards of U.S.A.

9. The address resolution method as claimed in claim 3,

wherein the inter-working function (IWF) uses as the connection oriented type communication system an IS-95 system which is standardized in EIA (Electronic Industries Association)/TIA (Telecommunication Industry Association), ANSI (American National Standard Institute) and CDG (CDMA Development Group) serving as institutes of standards of U.S.A.

10. An address resolution communication system comprising a plurality of moving mobile packet terminals (MS), a connection oriented type network which accommodates the plural mobile packet terminals (MS) and supplies a connection oriented type communication, a connectionless type network having a switch node (SW) and an inter-working function (IWF) for mutually connecting the respective networks to each other, the address resolution communication system comprising:

the inter-working function (IWF) for receiving data containing a "Gratuitous-ARP" packet which is one type of "address resolution protocol" (ARP) (see IETF:Internet Engineering Task Force Document RFC826) from the mobile packet terminal (MS) when the mobile packet terminal (MS) is handed over, and transmitting the "Gratuitous-ARP" packet to the connectionless type network to make the switch node (SW) receive the "Gratuitous-ARP"; and

the switch node (SW) for renewing a physical address table provided in the switch node (SW) on the basis of the content of the "Gratuitous-ARP" packet to specify the inter-working function (IWF) at the handover destination of the mobile packet terminal (MS).

11. The address resolution communication system as claimed in claim 10,

wherein when detecting the handover over the inter-working function (IWF), said mobile packet terminal (MS) creates and transmits the IP address of its own mobile packet terminal (MS) to a transmission IP (Internet Protocol) address portion and a target IP address portion, and creates and transmits to a transmission physical address portion an ARP request message in which the mobile ID of its own packet terminal (MS) is set.

12. The address resolution communication system as claimed in claim 10,

wherein when the handover over the inter-working function (IWF) is detected, the mobile packet terminal (MS) creates and transmits the IP address of its own mobile packet terminal (MS) to a transmission IP (Internet Protocol) address portion of the "non-group ARP" and a target IP address portion, and creates and transmits to a transmission physical address portion an ARP request message in which a mobile ID of its own mobile packet terminal (MS) is set.

13. The address resolution communication system as claimed in claim 10,

wherein when the handover over the inter-working function (IWF) is detected, the mobile packet terminal (MS) creates and transmits the IP address of its own mobile packet terminal (MS) to a transmission IP (Internet Protocol) address portion of the "non-group ARP" and a target IP address portion, and creates and transmits to a transmission physical address portion an ARP

request message in which the telephone number of its own mobile packet terminal (MS) is set.

14. The address resolution method as claimed in claim 10,

wherein the inter-working function (IWF) uses Ethernet as the connectionless type network, and when receiving data containing the ARP request message from the mobile packet terminal, the inter-working function (IWF) converts the data to an Ethernet frame which is the optimum format to the Ethernet as a physical layer of the connectionless type network and transmitting the frame to the connectionless type network.

15. The address resolution communication system as claimed in claim 10,

wherein the inter-working function (IWF) uses as the connection oriented type communication system an IS-95 system which is standardized in EIA (Electronic Industries Association)/TIA (Telecommunication Industry Association), ANSI (American National Standard Institute) and CDG (CDMA Development Group) serving as institutes of standards of U.S.A.